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ABSTRACT

This study focused on things learned from teaching doctoral students (17 doctoral and 2 masters students) about qualitative analytic strategies. Researchers used a grounded theory approach while simultaneously drawing from literature related to adult learning theories, doctoral student training, and curricula development, all of which informed course design and data analysis. The central questions of theoretical and practical importance focused on course structure, pedagogical strategies, how doctoral students experience these aspects in learning qualitative research methods, and how instructors learning to identify and meet students' emerging needs. Findings include contextualized examples of how the course supported students, how students received feedback in developmentally different ways, and the role of student resistance and emotion as they were scaffolded through the course. The study contributes new ideas to the literature with regard to the challenges faced and innovative options developed to enhance doctoral students' development and their learning of qualitative research knowledge and skills. (Contains 2 tables and 83 references.) (SLD)

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# Learning Qualitative Data Analysis in a North American University: Teaching Reflections on Creating Supports and Scaffolds for Researcher Development

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Running Head: TEACHING QDA– SCAFFOLDS FOR RESEARCHER DEVELOPMENT

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**Abstract**

This paper focuses on our learnings from teaching doctoral students qualitative analytic strategies. We use a grounded theory approach while simultaneously drawing from literature related to adult learning theories, doctoral student training, and curricula development, all of which informed course design and data analysis. Our central questions of theoretical and practical importance focus on course structure, pedagogical strategies, how doctoral students experience these aspects in learning qualitative research methods, and how we as instructors learned to identify and meet students' emerging needs. Findings include contextualized examples of how the course context supported students, how students received feedback in developmentally different ways, and the role of student resistance and emotion as we scaffolded them through the course. This study contributes new ideas to the literature with regard to the challenges faced and innovative options developed to enhance doctoral students' development and their learning of qualitative research knowledge and skills.

## Biographical Notes

Ellie Drago-Severson is a teacher and qualitative researcher at Harvard Graduate School of Education who is passionate about supporting adult learning and development. Drago-Severson's work centers on bridging research and practice. Her research interests include enhancing teaching and learning in multiple contexts through reflective practice, qualitative research, school leadership, faculty development, and adult and adolescent learning.

Anila Asghar is an advanced doctoral fellow at the Harvard Graduate School of Education and research assistant at the Science Education Department, Harvard Smithsonian Institute for Astrophysics. Her research interests include curriculum, cognitive development, and brain development, teacher education, qualitative research, and peace studies.

Sue Stuebner Gaylor is an advanced doctoral fellow concentrating in higher education administration. Her research interests include issues of leadership and decision-making within the context of private, regional liberal arts colleges.

## INTRODUCTION

> Can perspective scholars be prepared to appreciate and learn from the presence of epistemological controversy and diverse perspectives? How might graduate programs in education develop researchers who have the capacity to appreciate and perhaps use multiple perspectives and methodologies? (Young, 2001, p. 3)

Throughout the world, education faculty are examining questions related to improving the preparation of educational researchers. Some scholars explore critical epistemological questions concerning education such as what knowledge counts and what constitutes evidence (Young, 2001), while others engage in inquiry about theoretical approaches and what core methods should be taught (Schoenfeld, 1999). Still other scholars and educational researchers struggle with questions about the type of preparation needed not only to prepare educational researchers for today's challenges, but also for the complex demands of future educational research (Page, 2001; Siddle Walker, 1999).

Enhancing doctoral student research training (and by extension future research) is at the forefront of teaching and learning efforts in the academe (Young, 2001; Lagemann & Shulman, 1999; Page, 2001; Metz, 2001; Pallas, 2001). Yet, there is a little discourse about doctoral curricula (Gumport, 1997). Furthermore, there is a dearth of research that specifically examines how graduate methodological coursework trains doctoral students to meet the complex demands of becoming skilled educational researchers (Pallas, 2001). There are, however, a few recent exceptions that explore the intricacy of teaching methods courses and how these support the development of educational researchers (see for example, deMarris, Roulston, & Lewis, 2002; Metz, 2001). Education faculty, scholars, and students alike cite the need to re-envision doctoral preparation of educational researchers and urge discussion about and investigation into these critical matters (Young, 2001; Metz, 2001; Page, 2001; Pallas, 2001). Such dialogue and research will provide guidance as to how education faculty might improve practice and develop

more useful methods courses, illuminate the problems and possibilities of teaching and learning qualitative methods, and create widespread knowledge about more effective methods for training doctoral student researchers in the field of education.

This research responds to these calls. In this paper we focus on our (i.e., an instructor and two advanced doctoral student teaching assistants) learnings from teaching an interdisciplinary qualitative data analysis (QDA) seminar that brings together doctoral students who are engaged with or preparing for doctoral dissertation research in various fields related to education at a graduate school of education at a North American university. In particular, this research describes: (1) the seminar structure/context and how it worked to facilitate the development of a research community, (2) the various and diverse pedagogical strategies, classroom practice, and exercises we employed to support student learning, and (3) contextualized examples of how doctoral students made sense of their learning experiences throughout the semester. The goal of this research is two fold: to raise awareness of effective practices for preparing doctoral student researchers for qualitative research, specifically in relation to data analysis, and to illuminate what we learned about how pedagogy, curriculum, and embedded scaffolds sustained students' learning over time in this seminar. We offer our learning experiences and strategies as a useful map to other educators and researchers.

From January to June 2002,we examined our reflections about how 17 (15 doctoral and 2 masters) students enrolled in different doctoral concentration programs across the university appeared to experience our pedagogy and classroom practices. In particular, through the strategies that we employed to support student learning (i.e., reflections from our teaching observations, student meetings, memo assignments, data analysis convenings, journal entries, observations of AERA-style class presentations, mid-semester and end-of-term course

evaluations, and teaching team meetings) we sought to understand how students in the QDA course developed over time as qualitative researchers. The practical and theoretical questions guiding this study are: (1) How might teachers shape course structure as a space to support doctoral students' development as researchers and their learning of qualitative analytic strategies in their university classrooms? (2) What kinds of pedagogical strategies, classroom practice, and exercises can be employed to effectively facilitate doctoral student learning of qualitative analytic strategies? and (3) How do doctoral student researchers experience the teaching and learning of qualitative analytic strategies over time? What are the challenges or sticky points they encounter in learning analytic skills?

## THEORETICAL BACKGROUND

In this section, we discuss three bodies of literature that informed the course design as well as the analysis of data. These include theories of adult learning, the context of the seminar, and curriculum development.

### The Literature on Adult Development

> Although most education is not consciously and explicitly directed toward psychological development, the process of education itself implies growth and development. Also, there is a considerable investment of the self in education. Even in highly technical or skills-based courses, the learner is concerned with questions that impact the self. (Tennant & Pogson, 1995, p. 191)

From a developmental perspective people actively make sense of their experiences in qualitatively different ways (Brookfield, 1995; Daloz, 1983, 1986, 1999; Kegan, 1982, 1994; Kegan et al., 2001a; Kegan & Lahey, 2001; Mezirow, 1991, 2001) and growth occurs along a continuum of progressive, gradual, and qualitatively different levels of development[1].

[1] In this article, we use the terms ways of knowing, levels of development, meaning making systems and developmental orientations interchangeably.

Development—shifts in the way a person organizes experiences—occurs throughout the lifespan. In other words, with appropriate forms of support *and* challenge, people can grow—thereby developing capacities to better manage the complexities of learning and life. Importantly, adults, with different ways of knowing, experience the *same events* in qualitatively different ways depending on how they construct their experience.

According to Robert Kegan's (1982, 1994) constructive-developmental theory growth involves a constant re-negotiation between what constitutes self and what constitutes other. His theory centers on two key premises: (1) that people actively *construct or make sense of* their experiences and (2) that the *ways* in which people make meaning of their experiences can change or *develop* over time. In adulthood, the three most common ways in which people make sense of their experiences are the *Instrumental way of knowing, the Socializing way of knowing* and the *Self-Authoring way of knowing* (Kegan, 1982, 1994). Table 1 presents an example from the Adult Development Study's (Kegan, Broderick, Drago-Severson, Helsing, Popp, & Portnow, 2001a) research which investigated how adult learners from three different learning oriented programs experienced teaching and learning in their classrooms. Specifically, this table highlights how adults with different developmental orientations (i.e., ways of knowing) make sense of what it means to be a good teacher. This research suggest that in any classroom of adult learners it is likely that learners will be making sense of their experiences in developmentally different ways; therefore teachers need to attend to this type of developmental diversity. To do this it is necessary to incorporate pedagogical practices which will support *and* challenge adults with different ways of knowing (Kegan et al., 2001; Drago-Severson, in press).

[insert Table 1 here]

As Table 1 shows what constitutes support for a learner with a particular way of knowing may constitute challenge for a learner with a different way of knowing—and in order to support growth a person needs both developmentally appropriate supports and challenges. We include this example to provide a thumbnail sketch of how a developmental mindfulness can (and did) inform pedagogy and practices. Keeping this kind of developmental diversity in mind, as instructors, we offered various forms of support and challenge to learners in the QDA seminar so that it would serve as a robust context for learning.

Although adult developmental theory can be a powerful tool for understanding how adults develop during engagement in learning contexts (Drago-Severson et al., 2001a, 2001b; Kegan, 1994; Levine, 1989), it has been largely underutilized to understand the process of preparing educational researchers. Currently, developmentalists critique approaches to supporting adult development in K-12 elementary and secondary schools (Brookfield, 1987, 1995; Daloz, 1983, 1986, 1999; Kegan, 1982, 1994; Kegan & Lahey, 1984, 2001; Levine, 1989, 1993; Oja, 1991). They argue that adults at various stages of ego and intellectual development respond differently to the options provided by learning opportunities. In fact, Kegan (1994) contends that much of what is expected of teachers for them to succeed within widely used models may be beyond their capacities. By extension, we suggest that the same may be true with regard to the value of using a developmental framework to better understand how to prepare educational researchers. In other words, what doctoral students need in order to grow to become skilled researchers may vary depending on their developmental capacities.

To support learning and growth, context must be considered (Kegan, 1982). In other words, a classroom context can serve as what Kegan (1982, 1994) refers to as a "holding environment" which can 1) help adults grow to better manage the complexities of learning, and

2) be spacious enough to provide developmentally appropriate support and challenge to adults who make sense of their experiences in *developmentally different* ways.

According to Kegan (1982, 1994) a "holding environment" has three functions. First, it needs to "hold well," meeting a person by recognizing and confirming who that person is, without frustration or need for immediate change. It provides appropriate supports to accommodate the way the person is currently making meaning. Secondly, when a person is ready, a good holding environment needs to "let go," by challenging learners and permitting them to grow beyond their existing perceptions to a new way of knowing. Thirdly, it "sticks around," providing continuity, stability, and availability to the person in the process of growth, so that relationships can be re-known and reconstructed in a new way, a way that supports who the person has grown to become (Drago-Severson et al., 2001).

Drawing on developmental theories (Brookfield, 1987, 1995; Daloz, 1999; Kegan, 1982, 1994; Kegan & Lahey, 2001) this study illuminates the interplay between a person's developmental capacity and his experience in this seminar, classroom exercises and initiatives aimed at supporting learning. Since Kegan's theory illuminates *how* people construct their experience and considers how contexts can provide both supports and challenges for growth, it offers a way to think about providing support to doctoral students. We discuss how seminar participants, with different preferences, needs, and possibly developmental orientations, needed *different* forms of support and challenge in order to learn and grow as researchers.

The Context of the Seminar

Closely related to the literature on adult development is research on doctoral student training, which emphasizes the structure and course context. This scholarly work addresses important questions, such as how to best train and support the development of educational researchers who

will be equipped to conduct research in a changing world (Lagemann, 2000; Lagemann & Shulman, 1999; Metz, 2001; Miller, 1999; Page, 2001; Pallas, 2001; Schoenfeld, 1999; Siddle Walker, 1999; Tooley & Draby, 1998; Viadero, 1999). While many researchers have made important theoretical and methodological contributions by illuminating various analytic approaches and strategies (e.g., Boyatzis, 1998; Coffey & Atkinson, 1996; Denzin & Lincoln, 1998; Kvale, 1996; Lapadat & Lindsay, 1999; Maxwell, 1996; Miles & Huberman, 1994; Rogers, 2001; Seidman, 1998; Silverman, 2001; Strauss & Corbin, 1998; Wolcott, 2001); there is a lack of research illuminating how these approaches are used in the teaching and learning of qualitative research. This study addresses this gap by asking, how does curricula and course structure prepare doctoral student researchers for the challenges of conducting high-quality, ethical research?

The literature on doctoral research training programs in research universities posit "a developmental model of professional socialization" (Simpson, 1979 as cited in Pallas, 2001) in which students "learn appropriate skills and values as they move through a set of developmental stages" (Pallas, 2001, p.7). However, Pallas (2001) challenges the underlying assumptions of the "professional socialization" model (i.e., that students are passive participants in the process, that personal experiences are irrelevant to research preparation, and that students' values and skills remain implicit versus explicit). Instead, Pallas (2001) proposes Etienne Wenger's (1998) "concept of community of practice" as a model for preparing and supporting the development of educational researchers.

In teaching a QDA seminar, we sought to develop a community of researchers in which students were both individually and collectively supported in their development as educational researchers. We drew on research related to supporting teachers' development in school contexts

to inform our classroom structure and pedagogy. This literature suggests three ways to support teacher learning: 1) creating a developmentally-oriented culture (Evans, 1996; Sarason, 1995), 2) building interpersonal relationships among adults (Barth, 1990; Bolman & Deal, 1995), and 3) by emphasizing adult learning (Johnson, 1990, 1996; Blasé & Blasé, 1999, 2001). However, this research is almost entirely theoretical (Drago-Severson, in press) and the question of how *specific* teaching practices support adult learning within the context of a university QDA seminar has not been investigated. Here, we illuminate what we learned about how the doctoral students in this seminar made sense of their learning experiences and our teaching initiatives aimed at facilitating their development as researchers. Our pedagogy focused on developing the seminar context as an enhancer to students' growth as individuals and as a community of researchers.

Research on Curriculum Development

Theories of curriculum development complement the literature on adult development. The constructivist approach to education views learning as a process of active and deliberate engagement on the part of the learners (Perkins, 1992). A constructivist curricula takes into account the social and personal needs and interests of the learners, provides a clear description of the goals, creates opportunities for learners to engage actively and reflectively, and fosters strong intrinsic or extrinsic motivation (Unruh, 1975; Perkins, 1992). Individuals actively construct knowledge through interacting with the environment rather than passively acquiring it from the environment (Piaget, 1978, 1980; Snelbecker, 1974).

Discussion is a corner stone of constructivist practice since it helps learners identify and clarify their pre-existing knowledge and fosters the development of collaborative skills and attitudes in learners (Bridges, 1988; Good & Brophy, 2000; Foote

et al., 2001; Johnson & Johnson, 1989). It also helps in assessing "the importance of the findings discovered during the research phase and provide avenues for sharing, reflection, and assessment in the end phase" (Foote et al., 2001, p.53). Social interactions and collective reflection constitute a very important part in the process of constructing new knowledge (Bruner, 1990; Dewey, 1938; 1955; Vygotsky, 1978). Supportive learning environments encourage learners to collaboratively create and control the development of their learning (Foote et al., 2001; Confrey, 1985; Ching, 1996).

Curricula cannot be responsive without a constant flow of feedback between the teacher and the leaner about the dynamics of instructional process and its effectiveness. The purpose of evaluation is to aid learning (Unruh, 1975). "Each person who uses the products of curriculum development should experience success without being labeled or typed" (Unruh, 1975, p. 85). An important feature of the QDA course was that the majority of the students did not take it for a grade. The instructor encouraged students at the start of the course to make this decision so that they could focus on the feedback provided and so, ideally they could be empowered to progress at their own pace and to enable them to realize their maximum potential.

An interdisciplinary curriculum draws on the concept of "interrelatedness of knowledge," by creatively synthesizing relevant ideas from a variety of contexts that permeates our lives (Post et. al., 1997, p. 5; Brazee & Capelluti, 1995). While Gaff (1989) argues that knowledge is enriched by integrating ideas, concepts, and theories from multiple fields, Tchudi & Lafer (1996) envision that "universities (and other scholarly institutions) will, in coming decades, see a major rearranging of their structures, leading away from disciplinarity and toward interdisciplinary point of views" (p. 8). This kind of interdisciplinary approach to curriculum informed the

foundation of the QDA course in that we sought to enroll students from a variety of interest backgrounds and at different points in their doctoral student milestones.

In summary, the literature related to adult learning theories, doctoral student training, and curricula development all informed our analysis and course design. Next we will highlight the key features of the course context and our methodological approach to this research.

## METHODS

### Context of Course

The Qualitative Data Analysis (QDA) seminar is one course offered in a school-wide series of qualitative courses at a major university's Graduate School of Education in North America. The qualitative sequence for doctoral students at this university is designed as a four-pronged approach, meaning that there is no single introductory course in qualitative research that serves as a survey course. Rather, the qualitative series at this institution offers graduate students opportunities to be introduced to, develop and integrate their skills in four distinct and related areas: (1) *data collection*; (2) *data analysis* (analytic strategies, ethnographic approaches; case study approaches; and narrative inquiry); (3) *specialized courses* in various concentration areas (e.g., Culture and Discourse, Portraiture), and (4) *research design*.

The specific course examined in this study, *Qualitative Data Analysis*, is considered a foundation qualitative course at this university. Students learn (1) various strategies for analyzing qualitative data (e.g., inductive coding, categorizing, crafting profiles, and creating narrative summaries) and building theory; (2) how to apply these strategies to previously collected data and consider alternative interpretations; (3) how to display data in various ways; and 4) how to weigh and consider issues of reflexivity, ethics, representation, and validity in the

analytic process (Drago-Severson, Course syllabus, 2002). The aim of this course is to benefit students with prior qualitative research experience and developed skills for qualitative data collection from "hands-on" experience by applying and integrating strategies to effectively analyze their data and present findings in written and oral forms. The students enrolled in QDA were required to complete a series of analytic exercises, memos and an end of semester oral AERA-style presentation in order to practice learned skills and demonstrate competence in applying qualitative analytic strategies.

QDA is a "limited enrollment" course at this university, which means the instructor designed a statement of interest form in which students were asked to detail their previous backgrounds, to reflect on their experience with qualitative data, and list out the types of data they had collected or had access to. Based on completion of a statement of interest form and having completed the pre-requisites for the course, the instructor selected 17 students to enroll in the course, who also comprise the sample for this study. This sample is diverse with respect to number of years as a doctoral student (ranging from first to sixth year), gender, race, ethnicity, research interests, educational background and experience. Many of the students were preparing for critical milestones in their dissertation process including qualifying papers and dissertations. In addition, the students represented various concentration areas across the university. The two master's students within the sample were invited to participate based on their previous coursework, their knowledge of qualitative research, their possession of data, and their maturity to contribute to the seminar setting. This sample not only provided a diverse group to examine for this study, but it also served the primary purpose of cultivating a rich atmosphere for support and challenge within the developing research community of this course.

A teaching team, one instructor and two teaching assistants, taught the QDA course. The instructor has extensive experience teaching qualitative methods at the university level and conducting qualitative research. She has taught introductory qualitative interviewing, introductory qualitative research, and advanced qualitative research methods courses over a ten-year period. The teaching assistants, two advanced doctoral students who represented different content and programmatic areas, have engaged in research, have enrolled in various qualitative methods courses, and have taught other qualitative sequence classes. The class met once a week for three hours during the spring semester (January to June 2002).

Data Collection

The data for this research are derived entirely from various sources that informed our thinking about student learnings throughout the semester (January to June 2002). All of our data collection activities centered on what we could do as a teaching team to better meet the needs of our students. These included observation notes from weekly class meetings, data analysis convenings, and the AERA-style class presentations. In addition, we cultivated a number of documents including copies of our feedback on the seven student written assignments, students' mid-semester and end-of-term course evaluations, and journal entries from weekly teaching team meetings. All data were analyzed throughout the term to assist us in responding to students' needs, to track changes in students' learnings and to provide important validity checks.

In addition, the instructor frequently met with numerous students in the course individually during three to four office hours each week. The teaching assistants did not hold regular office hours, but also met regularly with individual students. Many students emailed the instructor and teaching assistants throughout the term with individual concerns, questions or

ideas. All of these sources of information -- the class and interpretative community observations, notes from teaching team and student conferences, student written work and emails – provided us with multiple perspectives on how the course operated, how students were progressing, and how we as teachers were learning ourselves. These multiple sources also illustrated the changes over time in students' thinking and performance.

Each week after class, the teaching team met for one to two hours. In our meetings, we took extensive notes on our conversations about individual and collective student progress, what students needed help with, what aspects of the course were working well and which needed refinement, and identifying the most important issues to present in the next class. The different perspectives of teaching team members, as well as the notes we recorded, provided a rich array of ideas and reflections about course content and the ways individual students were progressing.

## Data Analysis

Data analysis strategies included coding for important concepts and themes, organizing theoretical and emic codes (Geertz, 1974) into matrices, and creating narrative summaries (Coffey & Atkinson, 1996; Maxwell, 1996). We used a grounded theory approach in analysis while examining how various literatures cited earlier informed our analysis.

Field notes, including theoretical notes were recorded and analyzed. Patterns across categories (e.g., the value of working in interpretative communities) were explored by creating displays (Miles & Huberman, 1994) and then analyzed over time. Data was examined for both "confirming" and "disconfirming" instances of themes (Miles & Huberman, 1984, p. 216). Additionally, we discussed classroom observations, student memos, and our interpretations to incorporate alternative interpretations.

## FINDINGS

Our analysis revealed three main themes: (1) several key elements of the course structure and context supported and challenged students' development as researchers and nurtured the growth of a research community, which extended beyond the 15 weeks semester; (2) combining a variety of pedagogical strategies, memo assignments and in-class exercises and paying close attention to the kinds of feedback provided appeared to scaffold students with different learning styles, needs, and who were at various stages in the doctoral program; (3) the supports and challenges doctoral student researchers reported as they learned qualitative analytic strategies over time and how our weekly teaching team meetings helped us to identify students' emerging needs, develop strategies and exercises to encourage them to the next phase, and attend closely to their learning.

In this section we provide examples of the ways in which students appeared to experience different facets of the QDA course and show how the various theoretical perspectives reviewed earlier inform our understanding of and actions toward best supporting students' emergent needs. In analyzing data from our team meetings and observations during the term the following themes emerged and relate to how we worked to develop effective ways to meet students emerging needs as they learned qualitative data analysis strategies by offering both *support* and *challenge*, by creating a community of practice, and by employing constructivist curricular techniques. Specifically, we discuss: (1) aspects of the course context and structure that students named as beneficial to their learning qualitative data analysis; (2) how students appeared to experience feedback and peer commenting on a memo assignment in qualitatively different ways; and (3) the role of emotion and resistance in learning and how we observed this to change over time.

Course Context and Structure

What kind of course structure/context is needed to support and challenge the development of doctoral students in qualitative research? As explained earlier, the curriculum design for the course was guided by the constructivist approach and placed a heavy emphasis on learner-centered and collaborative pedagogic strategies to provide effective educational experiences to facilitate students' learning and growth as qualitative researchers. The teaching team endeavored to provide a nurturing and stimulating environment where students could reflect, create new ideas, and apply ideas to their research through active engagement with the materials, teaching team, and their peers. Our emphasis was to build a learner centered inquiry curriculum within a "multiple ways of knowing framework" (Ching, 1996).

Collaborative reflection and learning served as a foundation of the QDA curriculum. The doctoral students interacted in small inquiry groups in class, which enabled them to dialogue about key ideas presented in the readings for each class and regularly discuss these issues in relation to their own research. The course purposely included a variety of mechanisms aimed at maximizing the students' freedom for creativity and creating a space for open-dialogue and trust. Some pedagogical strategies included mini-lectures, working in pairs and triads to discuss critical questions related to readings, inviting guest lecturers who were more advanced doctoral students and researchers in the field, and in-class data analysis exercises so that students could practice using analytic skills on their own and other people's data. One of these activities, free-write exercises, is described below.

**Free Write Exercises**

The instructor created structures and an array of opportunities for student researcher teaming and pairing within and outside of the class in the class design, which served as a context for inquiry,

discussion, and making connections between course readings, lectures, and exercises. For example, several classes began with an in-class free-write exercise in which the instructor posed several questions about the weeks' collection of readings as well as the relevant data analysis strategies on which we were focusing at that time. These writing opportunities served to help students focus on topics upon entering the class, and as a context for exploration of issues related to the complexity of data analysis and enabled students to relate to the challenges that were emerging as they engaged in data analysis. For instance, during the week on writing about our research *findings* and issues of power, authority, representation and reciprocity, one of the free-write questions to which students could respond was, "As researchers, we hear stories and observe life which is normally back-stage, secret or private. What do you see as potential consequences that your research and writing may have for the participants in your study?" (Drago-Severson, C13 handout, 2002). After spending a short amount of time on the free-writes individually, students were invited to share their learnings in small groups and in a large-class discussion.

The opportunity to engage in an individual free-write and then discuss one's thoughts with another individual or small group allowed students of various learning styles to participate in a safe manner as well as scaffold students into asking critical questions of the readings and themselves. In the final class meeting, students discussed the course components they valued most. Most students voiced their appreciation for the safe environment for exchange of views and scaffolds. As one student says, "I really value the free writes. They help me realize what I am thinking about" (Course evaluations, 2002). Some students expressed varying opinions of the free-write strengths. While a couple students "dreaded" the consistent routine of free-write, several asked for questions to be included on the syllabus or emailed prior to the class session,

while some students used the free write questions to explore their thinking in journals outside of official class meetings. Moreover, students appeared to participate in a variety of ways during the partner or small group discussions. For instance, some students who tended not to join in the large class discussions spoke animatedly during the smaller group settings. Thus, the free-write exercises in class illustrate just one collaborative approach embedded in the course design that enabled the instructors to both challenge and support the students with a setting for safe analytic questioning (or "holding environment"), that scaffolded students as they learned how to engage in critical inquiry in a research community, and which helped students consider strategies they could employ beyond the course in their own research.

**Interpretive Communities and Convenings**

Another aspect of the QDA course context, interpretive communities (IC's), provided a most important avenue for collaborative work. Two interpretive communities were constituted for this purpose. One had eight and the other consisted of nine students. Each teaching assistant acted as the lead facilitator for one group. The instructor attended the meetings of each interpretive community on alternate weeks. Every week one student shared his or her data and sought the help of the interpretive community members in terms research issues, questions and concerns related to them. For example, students created packets centered on specific data analysis strategies, such as conducting cross-case analysis, developing analytic questions for analysis, and coding on the interview transcripts. The IC's also offered a unique opportunity to seek multiple alternative interpretations of data, developing grounded theory, expanding the dimensions of analysis, questioning assumptions, and addressing validity and ethical issues.

The philosophy underpinning the IC's emphasized the creation of an open and safe space for them so that the students could pursue their specific research interests. For this purpose, during the initial IC meeting, the students developed *safe section rules* for the interpretive community meetings in order to be able to engage in collective reflection and constructive criticism about each other's work. For instance, some of the safe section guidelines created by students in one of the IC's included: "giving positive feedback before criticism," "allowing one another to test out strategies, to take risks," "really listening and not judging others," and "being present, not only arriving on time and staying until the end, but also giving the convener of the day our focus and attention" (Drago-Severson, Safe Section List, 2002). The teaching team revisited the safe section rules in subsequent IC meetings with students to ensure that all students continued to feel safe in their IC groups.

Weekly convenings were the heart of Interpretive Community. A convening is when an individual student consults with IC colleagues around a specific research issue *or* question *or* problem of importance to his or her analytic work (Drago-Severson, Course Syllabus, 2002). Each student had the opportunity to convene the IC once during the semester for a forty-minute session. To prepare for a convening, each student created a consultation packet consisting of a short memo (i.e., covering letter) from the convener to his or her IC colleagues that introduced his or her research question and topic and illuminated the specific analytic area in which the student would like help. Each student created a packet, which included a cover letter and data to be analyzed, and distributed it to IC colleagues the week before his or her convening so that IC members would be able to read the packet and provide feedback to the convener during his convening. The convening structure provided focused opportunities for students to incorporate multiple perspectives and interpretations in their analysis, to actively construct knowledge, and

to work in collaborative groups. Finally, several students acknowledged the powerful impact the convenings had on their learning during the semester and have created their own IC groups during the summer months and are still meeting throughout this academic year to continue with their own research.

In convenings students appeared to be supported as they actually named aspects of their own thinking and assumptions, which provided a space for them to become more aware of the thinking that guided their analysis. Collaboration with others in the group encouraged to individuals to become more aware of and share their own perspectives on their data and their research in general, and to widen their own perspectives by listening to and considering other people's perspectives and interpretations. We argue that the context of convening provided a safe "holding environment" (Kegan, 1982)—spacious enough to support and challenge students, regardless of their preferences, needs and possibly different ways of knowing, as they broadened their perspectives and oftentimes incorporated multiple perspectives on their research. Drago-Severson and Berger (2001) contend that cohort groups also serve as robust contexts to support and challenge learners with different ways of knowing. Similarly, the context of convenings in the QDA course appeared to provide a safe space—similar to a cohort—for adults with potentially different ways of knowing. Table 2 outlines the range ways adult with different ways of knowing experienced a cohort. By extension, we suggest that doctoral students potentially may have similar experiences within IC and convening groups.

[Insert Table 2 here]

As Table 2 illustrates, for *Socializing* knowers, who orient toward meeting the expectations of important others, the cohort served as a context in which they derived self-confidence from acceptance in the group. By extension, the context of convening and working

collaboratively with others may be experienced as a support to learning not only because of the concrete help of others in terms of learning analytic techniques but mainly because of the sense of belonging the group context provides. In contrast, adult learners who are *Self-Authoring* knowers, who view themselves as well as fellow group members as generators of knowledge, valued their experiences in the cohort because the group enabled them to enhance their own capacities. Following this logic, students in QDA may value the context of convening and working collaborative not only because it provides concrete support and a sense of belonging, but especially because it provides a context in which they are able to benefit from multiple perspectives which serve to enhance their own self-generated goals and perspectives. Thus, we argue that the context of working with others in convenings served as a context wherein adults with different ways of knowing were supported and challenged *and in different ways* by each other as they broadened their perspectives on analytic work.

From the perspective of training doctoral students, researchers have highlighted the rôle and benefits of collaborative learning in higher education and K-12 contexts (Bosworth & Hamilton, 1994; Eble & Noonan, 1983; Pedersen & Digby, 1995). Convenings are contexts that support principles of learning. For example, convenings provide a forum for students to actively construct knowledge and "to formulate questions and insights as they occur and to test them in conversation with others" (Elbe & Noonan, 1983, p. 73). Bosworth and Hamilton (1994), in *Collaborative learning: Underlying processes and effective techniques*, contend that, "In its self-authorized forms, social interaction has long been a part of traditional college education, particularly in medicine and the lab sciences" (p.1). The interaction among colleagues in convenings not only serves a social function, but the process of conversation and activity among group members promotes active learning (Elbe & Noonan, 1983).

The literature on a constructivist approach to curriculum also supports the concept of convenings in learning situations. From this perspective, convenings may serve as a context in which students engage in critical reflection on their data with the help of colleagues. According to Brookfield (1995) critically reflecting on one's work and experience is best achieved through focusing on the assumptions we make and bring to our work. Brookfield (1995) defines assumptions as "the taken-for-granted beliefs about the world and our place within it that seem so obvious to us as not to need stating explicitly" (p. 2). Critical reflection, Brookfield explains, is key to improving teaching practice and to broadening one's own perspective:

> Without this habit, we run the continual risk of making poor decisions and bad judgments. We take action on the basis of assumptions that are unexamined and we believe unquestioningly that others are reading into our actions the meanings that we intend. (pp. 3-4)

We argue that this process is especially important in considering interpretations of data. Student comments in the final course evaluations (which are implemented in an on-line anonymous fashion) reinforce the theoretical and practical importance of the interpretative communities in their own progress as qualitative researchers. One student explained the important of the IC's was the chance for "[s]eeing how others are working and learning about what others are doing. My group is nice and supportive with each other" (Drago-Severson, Course evaluations, 2002). Several students echoed this kind of statement, emphasizing the supportive atmosphere or "holding environment" that creates a space for safe dialogue.

Other students reinforced the power of ICs in gaining new ways to view their own work through collaboration. For example, one student stated: "I think the IC convenings were invaluable. Sitting around a table with twelve people really devoted to analyzing your work and asking you tough questions is such a deep learning experience" (Drago-Severson, Course evaluations, 2002). As this student identifies, the strength of convenings rested upon the

opportunity to have multiple perspectives critiquing a product, the students' deep care or "devotion" to research, and the "tough questions" generated in the IC setting. Another student echoed this sentiment: "The IC groups were incredibly helpful because we could collaborate and get multiple perspectives" (Course evaluations, 2002). As instructors, we witnessed the students evolving as the semester progressed into very supportive, yet critical colleagues in their feedback to one another in convenings.

The IC groups also proved essential in creating a research community within the class. Students cited the importance of receiving feedback in a safe manner. One student echoed what many others wrote on final course evaluations: "Because the IC groups were about getting diverse perspectives on our work and we talked a lot about member checking, I think it encouraged diverse perspectives a lot" (Course evaluations, 2002). As this student suggests, each IC enjoyed high participation by virtually all group members each week. Thus, not only did the IC exercises help support and challenge students in their thinking, it also cultivated a rich community of researchers in which "diverse" perspectives were shared and in which students learned how to be critical of each others' work in a respectful, yet highly engaged manner.

**Extending Course Structures Beyond the Classroom**

> Everything about this course is useful. Readings are very thoughtfully chosen and memos build on each other to a final paper in way that shows careful design by [the instructor]. GREAT guest speakers – I especially appreciated the expert on analysis software and the woman who addressed the publishing process. The end of the class conference was an excellent experience. I feel that by giving a paper I have been coached in how to be a researcher. This is a must-have experience for doctoral students and should be replicated beyond this course. (Drago-Severson, Course evaluations, 2002)

Finally, as instructors, we were excited to see how some students extended several aspects of the course context and structure into their own work during the summer months as beyond. During

the final class meeting, one student shared with the instructors that she and three other women in the class had created their own separate IC group to help support them in their research proposals and related dissertation work. Moreover, students illustrated how strong our sense of a research community grew when they requested to have all of the final papers copied together in a course packet for review. Finally, due to student requests during our final class discussion, an active class email listserv has been created. This listserv has been used since the course has ended to discuss upcoming qualitative conferences, qualitative software, and issues related to qualitative research. As these activities illustrate, the course structure yielded a supportive model that students have chosen to carry with them in order to continue the sense of community and collaboration beyond the confines of a semester structure. As one student summarizes, "[The instructor] put a tremendous amount of effort into making the class cohere as a learning community and into individual student feedback. This combination of building community and supporting individuals within that community was exemplary" (Drago-Severson, Course evaluations, 2002).

Within this structure and context, we employed a variety of pedagogical practices and focused a great deal on providing feedback to students in a manner that met their developmental needs as well as addressed their analytic skills. The next section will highlight the role of feedback in the QDA course and how students of varying needs experienced this process.

## Receiving Feedback

What types and levels of feedback best support individual student's learning? Many of the pedagogical practices in the QDA course were designed to provide students with multiple opportunities for giving and receiving feedback on their work. Given that students bring various

developmental needs with them to this process, we paid close attention to each student's reaction to feedback on written assignments in order to best help support and challenge that individual. In addition, the QDA course design enabled students to receive multiple perspectives on their work including feedback from the instructor, teaching fellows, and peers. This diversity of feedback allowed students to gain a variety of ways to examine their own work. Finally, by engaging the students in peer review exercises and the IC groups, students were scaffolded by the instructors on how to provide feedback to their peers, a skill many cited as a valuable tool they can extend beyond the course context. In this section, we discuss ways the students experienced feedback from instructors, from their peers in a peer review exercise, and how we as instructors attended to feedback from students.

As instructors, we gave a variety of feedback to students as we worked to support and challenge their learning, which included: (a) verbal and written feedback on weekly writing assignments, (b) verbal and written feedback on individual convenings, (c) peer commenting on writing assignments, (d) instructor's meetings with individual students in which they were offered specific help with various aspects of their work, (e) individual meetings between the teaching fellows and students to assist them with their work and as they applied various analytic strategies to data, and (f) instructor's emails to the students on their collectively work in class. To provide context, we will briefly present the ideas that guided our feedback on student memos. First, we considered memos as drafts and also as opportunities for students to practice various analytic techniques (e.g., constructing a narrative summary). Our written feedback was detailed and our intention in offering feedback was to gently guide students' learning. Written feedback was aimed at celebrating what each student was doing well and offering suggestions for alternative ideas and interpretations for the student to consider. We did this mostly by posing

questions and by inviting students to consider alternative interpretations. In the end of the semester written student evaluations, by far the most common support listed was that they appreciated the written feedback from the teaching team because it helped them to further their thinking and develop more sophisticated analytic skills.

**Receiving Feedback from Instructors**

Developmentally speaking, learners experience—and take in feedback—in different ways. As explained earlier, how learners construct knowledge varies at different developmental levels (Portnow & Popp, 1998 as cited in Helsing, Drago-Severson, Kegan, Portnow, Popp, & Broderick, 2001). For example, for students with an *Instrumental way* of knowing, knowledge is considered as something that is right or wrong and derives from an external authority versus being internally generated. Learners with a *Socializing way* of knowing construct knowledge as information that a person *should know* in order to meet the goals and expectations of valued others or authority figures (e.g., a teacher). Whereas for students who have a *Self-Authoring way* of knowing domains of knowledge are context dependent and comes from an internal source.

Each of these ways of constructing knowledge influences how a student may perceive feedback. For example, an *Instrumental* learner may view instructor comments and questions on a memo as evidence that they were "right" or "wrong" whereas *Self-authoring* learners may review, and even seek out, instructor comments in order to enhance their own learning. As such, it is vital for instructors of doctoral students (and other adults) to consider the various ways students make sense of these and other learning experiences in order to consider what is most supportive to each individual learner.

Student experiences to feedback in the QDA course reinforced these theoretical perspectives. One group of students could not get enough written and verbal feedback. Throughout the semester office hours were well attended and served as opportunities for providing additional feedback on memo assignments and other aspects of the analytic process. In the final QDA course evaluations students listed the written feedback provided by the teaching team as one of the most valuable supports to their learning. One student explains, "Extensive written feedback on written work were very valuable feedback loops" (Drago-Severson, Course evaluations, 2002). Five students, for example, not only voiced appreciation for the written feedback we gave on written assignments, but constantly sought out opportunities for additional written feedback on analytic work and their questions related to research through email communications, one-on-one meetings with teaching team members, and feedback from colleagues in the class. For them, feedback was a cherished opportunity for enhancing their work and developing their ideas.

In contrast, a smaller group of students initially appeared to interpret our feedback as a statement they that were doing "something wrong" and not quite "getting it right." Rather than attending to the feedback we offered, one student in particular disregarded it initially and continued to write memos with the same types of statements even though we had questioned them on prior memos. In this case, we decided to limit the amount feedback we offered and to prioritize the types and levels of feedback we offered. We did this because our sense was that this particular student was having difficulty absorbing and integrating our comments. Later in the semester, after repeated invitations to this student to let us know if there was anything we could do to help him, we learned that the style of qualitative writing which we were advocating was in opposition to how the student was being encouraged to write in other courses. However,

by the end of the course, this student told the instructor how much he appreciated her "raising the bar" and how he "could hardly believe" that the students in this class worked as hard as they could, "even though it was a pass-fail course" (Drago-Severson, personal correspondence). This was, he said, very different from anything he's ever seen or experienced in graduate school.

As these student experiences illustrate, learners experience feedback in an individual and unique way that is related to how the person makes sense of his or her experience. When providing feedback to learners in the QDA class, as instructors, we constantly worked to consider how to offer feedback that supported learners and also challenged their thinking. Next we present an example below to illustrate how students experienced the process of providing and receiving peer feedback on a memo assignment.

**Providing Peer Feedback on an Analytic Memo**

How did different students experience giving and receiving peer feedback? To enhance student learning of analytic strategies we created an opportunity for each student to provide written feedback on a colleague's memo. For this assignment, the instructor prepared a rubric for each student to review in terms of how to give feedback to his or her partner. This rubric included the same kinds of items that we as a teaching team considered when we commented on written assignments. For example, the rubric included: did the student answer the questions in the memo assignment? Did the student provide evidence for their claim? (Drago-Severson, C7 handout, 3/13/02) Since we did not want to diminish the value of the students' feedback, in this assignment, we reviewed the memos but did not provide written feedback so that the students would be the lead commenters. In addition, we asked the students' permission to photocopy their feedback on these memos so we could get a sense of how they engaged in the exercise.

As with receiving feedback from the teaching team, students responded to this exercise in a variety of ways. Many students provided detailed comments to one another in a similar fashion to the instructors' feedback on memos. For instance, one student not only commented on the memo of her partner, she also coded an entire transcript that her partner had submitted as context for the memo assignment. Several students typed out detailed comments in addition to writing directly on the margins of the memo. Other students, however, experienced the peer exercise assignment as more challenging. For example, some students cited their reluctance to give more detailed critiques to their partners due to being "less advanced" students in terms of years in the program, having "less expertise" in their partner's content area, etc. During the class following the peer review exercise, the instructor led a discussion in which students talked in small groups and when possible, with their partner in the peer review exercise about what the process of giving peer comments was like. We then engaged in a large group discussion. As instructors, when some of the challenges students raised emerged, we encouraged those students to talk with his or her colleague about the feedback process directly to further their learning process.

As this example illustrates, like other situations in the class, students experienced the environment in a variety of ways. Some students embraced the exercise and participated fully, possibly suggesting they had a *Self-authoring way* of knowing (i.e., they considered themselves and their colleagues as sources of knowledge). Other students demonstrated more reluctance based on their perceived lack of knowledge or expertise, indicating they may have been making sense of this exercise (and experience) with a different way of knowing. However, because the QDA course included a variety of mechanisms to scaffold the peer review process and debrief the exercise, we hope that the students with various approaches benefited from the collaborative approach and learned skills they can use throughout their careers as doctoral students.

**Attending to Feedback from Students**

During our teaching team meetings we discussed important observations that related to student learning and this helped us in our teaching. For example, what can students hear and when can they hear it? The stream of evaluation did not follow a single route only from the teaching team to the students. The students were also invited to share their feedback about the curriculum and pedagogic techniques through structured midterm and final evaluations.

The teaching team thought, reflected, and engaged in decision-making collaboratively in order to shape a flexible and dynamic curriculum to address the unique issues and feedback that students shared related to their specific analysis. Some students, for instance, had interviewed their participants in their native language, such as Hindi, Portuguese, and Creole. While translating the text of the interviews into English they encountered issues related to descriptive and interpretive validity. They felt that it was a challenge to convey the meaning of some native proverbs, concepts, and terms expressed by their participants in English. A literal translation did not do justice, they felt. The strategy that most of them used involved translation and interpretation of the interviews to convey the essence of their participants' meanings as they understood them within their specific cultural contexts. Other students found it challenging to use Western theoretical frameworks as a lens to interpret their research findings based in different cultural contexts. Because the students who experienced both of these issues raised them as concerns, we used their feedback to create a special class exercise that was not in the original syllabus. We invited four students to talk about as a panel to share their specific challenges and issues in a special session with their peers. The insights shared by the students pertaining to their experiences were exceptional and helped their peers and us to consider these

issues with respect to their work. The experience also reminded us as instructors to be open and flexible with the course design so that student feedback can be directly addressed when possible.

Learning Opportunities as Supports and Challenges

Although the QDA course provided both instructors and students alike with a positive learning community, the attention to supports and challenges as well as the application of a constructivist curriculum sometimes resulted in moments of resistance and emotion. However, we as a teaching team continued to view these learning opportunities as critical steps in the students' developmental process of learning qualitative research. Next, we highlight some of the ways students initially resisted or reacted to course initiatives and designs as well as discuss how these learning opportunities shifted by the end of the course.

**The Role of Emotion and Resistance**

Since the QDA course typically enrolls doctoral students working toward institution requirements (a qualifying paper proposal and a dissertation proposal), the instructor required written assignments to adhere to the university's guidelines for proposal submission (12 point font, 1 inch margins, double spacing, page limits, etc.). The instructor designed a highly structured course for a variety of reasons. First, the structure helped to assess students' progress and track developing needs. In other words, we were able to meet them where they were, because of the multiple structures in place that helped us to know where they where. As described earlier, reflection and understanding how we construct knowledge is critical to learning (Ching, 1996). Thus, since this class was fast paced, in order to best support students as they moved through and applied the ideas from class, readings, etc., we did not accept late

memos. We employed this strategy to insure that students would have the chance to reflect on their work regularly and get the supportive and timely feedback they needed to help them move to the next phase of analysis.

Some students initially resisted different aspects of the course structure. For example, on written assignments, if a student turned a memo in that exceeded the assigned page limit, the instructors did not provide feedback past the allotted number of pages. If students turned in papers late, the teaching team read the assignment, offered to provide verbal feedback, but provided no written comments on the memo itself. Some students resisted these detailed specifications repeatedly at first and turned in papers that were single spaced, longer than the page limit, etc. One student submitted a lengthy convening packet that was primarily single-spaced. When her teaching fellow approached her to decrease the length and double space the text, the student responded as follows:

> I've taken a quick look at the convening blue sheets [guidelines for convening packets that were distributed at the start of the term] again, and can't actually find any instructions about length of convening packets or double-spacing. Maybe that's something to re-visit for the next time around…The double-spacing thing actually bothers me a little. Here's why: almost all of the course seems designed to teach good habits and to scaffold ongoing and increasingly self-sufficient work. (Drago-Severson, Personal correspondence, 2002)

For this student, the attention to details on assignments seemed inconsistent with the other supports the course offered her; however, from an instructional point of view, we saw these components as critical practice for the key academic milestones as doctoral students and had to continuously explain to students throughout the course the reasoning behind the requirements.

Students also responded to assignment specifications at times with emotion. One student initially did not understand and therefore questioned why the instructor was so explicit about the non-content specifications of each written assignment. Others laughed at the color-coding of

various handouts [e.g., blue for handouts related to analytic strategies and yellow for memo assignment guidelines], which the instructor used to illustrate one way to organize the vast amounts of data that students create in a dissertation project. However, by the end of the course, many students had begun or had submitted qualifying proposals as part of their own doctoral journeys. Numerous students remarked on how helpful it was to not only have access to the instructor for feedback on their proposals and to have greater knowledge for qualitative methods, but also how the rigorous requirements of written assignments had prepared them for the submission process. By the end of the course, students articulated their gratitude for the course supports, which earlier had been viewed as challenges. One student wrote,

> I really value almost all of it. I really value the free writes. They help me realize what I am thinking about. I love the memos. I like the partnering activities. I love the lectures. I really like the handouts and that they are color-coded. I really value the feedback on the memos. (Drago-Severson, Course evaluations, 2002)

Another student, who initially also resisted the assignment specifications, comments on how his perspective changed by the end of the course,

> [The instructor] provides thorough feedback and guides students towards their goals. Although the structure of the course feels rigid at first, it is EXACTLY what you need to be focused on your data. [The professor] is also a really caring person and she makes great effort to respond to people's needs. (Drago-Severson, Course evaluations, 2002)

Although at times, the teaching team was uncertain how to best handle the moments of resistance and emotion, we realized that they may just be a part of the process of cultivating a true holding environment that addresses the myriad of student needs. At the end of the term, one student summarized his or her experience in the course in the following way: "I think you're doing a great job of creating a holding environment for us [and] that your pedagogy illustrates your constructivist point of view" (Course evaluations, 2002).

**Teaching as a Team**

In addition to providing a positive learning atmosphere for students, it is also essential to consider the supports and challenges available for instructors. Attending to individual student learning is an intensive and rewarding process. As a teaching team, we sought to model the same principles used in the QDA course for our own meetings. We met regularly each week after class to discuss individual student progress, review the day's class, and preview the upcoming course content. We also emailed each other throughout the week and the instructor carbon-copied the teaching assistants on all correspondence to students so they could stay abreast of issues and concerns. The instructor actively sought out advice and feedback from the teaching assistants and provided numerous avenues for them to gain leadership experience in the class (i.e., leading a section, presenting her own work to the class, assigning meaningful tasks, and inviting them to co-author this article, etc.).

Not only did this level of collaboration provide a strong environment of support and respect, it also enabled the teaching team to gain various perspectives on the course. As we discussed the class experience each week and how activities worked, the teaching assistants often shared specific examples from the IC groups in which they could provide detailed information about how students appeared to experience the lesson. This information helped the instructor plan for future class sessions while giving the teaching assistants a significant role. Students seemed to be confident that they could approach any member of the teaching team with concerns or questions and knew their questions would be addressed.

## SUMMARY AND IMPLICATIONS

This research offers specific practices to help scholars, educators, and researchers create contexts that support the development of educational researchers. This study presents an opportunity for educational improvement by examining how particular practices work to support doctoral student learning and the development of educational researchers. By discussing the seminar structure, presenting a variety of practices and exercises aimed at supporting doctoral students' learning, and sharing our own learnings from teaching this seminar, we hope that our work and learnings serve as a resource for teachers, scholars, and educational researchers.

By continuing to identify these pedagogical practices and highlighting their potential for supporting doctoral student learning and development as researchers, teachers will be in a better position to explore them in greater depth within and across educational institutions. In effect, we can more carefully consider what is needed to better support the preparation of doctoral students for future research in our increasingly diverse and complex world.

Thus, our study has implications for the international community of qualitative researchers and educators vis-à-vis the training and preparation of doctoral students as researchers. A developmental perspective on doctoral student learning is a useful tool for understanding, supporting, and initiating powerful changes in student learning. We have shared our experiences of identifying the specific needs of doctoral students and the strategies to incorporate their feedback in the curriculum to respond to their needs. This study illuminates some benchmarks we observed in the process of developing doctoral students into qualitative researchers. By detailing students' experiences of learning during the semester, we highlighted the initial resistance some of them experienced, the ways in which they overcame their inhibitions, and the habits of mind and heart they eventually developed as researchers through constant support. We offer our learning process as teachers and researchers with the hope that it

will provide insights about the effective scaffolding strategies and practices that worked for the students, such as identifying and questioning their assumptions, peer review and peer commenting of writing assignments, working collaboratively in interpretive communities, and communicating their findings through writing and oral AERA-style presentations.

This study also illustrates the ways in which our teaching team worked together in terms of reflecting on students' learning and progress, thinking about their individual needs, and implementing our strategies. This shared experience has implications for educators in their own practice in various teaching and research contexts; they can adapt these scaffolds in accordance with their specific contexts to set up the highest standards of performance and develop a nurturing environment for their students to meet those standards.

The collaborative data analysis strategies our students employed are offered to help other qualitative researchers to engage in in-depth analysis with their peers. This study contributes new ideas to the literature with regard to the challenges faced and innovative options developed to enhance doctoral students' development and their learning of qualitative research knowledge and skills. Ultimately, if we actively seek ways to best support doctoral students as researchers, the future of educational inquiry and academe will be strengthened.

## REFERENCES

Barth, R. S. (1990). *Improving schools from within: Teachers, parents, and principals can make the difference*. San Francisco: Jossey-Bass.

Blasé, J., & Blasé, J. (1999). Effective instructional leadership through the teachers' eyes. *High School Magazine, 7(1),* 16-20.

Blasé, J., & Blasé, J. (2001). *Empowering teachers: What successful principals do.* Thousand Oaks, CA: Corwin Press, Inc.

Bolman, L. G. & Deal, T. (1995). *Leading with soul: An uncommon journey of spirit.* San Francisco: Jossey Bass.

Bosworth, K., & Hamilton, S. J. (Eds.) (1994). *Collaborative learning: Underlying processes and effective techniques.* San Francisco, CA: Jossey-Bass, Inc.

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks: Sage.

Brazee, E. N. & Capelluti, J. (1995). *Dissolving boundaries: Toward an integrative curriculum.* National Middle School Association.

Bridges, D. (1988). *Education, democracy, and discussion*. Lanham, MD: University Press of America.

Brookfield, S. (1995). *Becoming a critically reflective teacher*. San Francisco: Jossey-Bass.

Brookfield, S. D. (1987). *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting*. San Francisco: Jossey-Bass.

Bruner, J. (1990). *Acts of meaning.* Cambridge, MA: Harvard University Press.

Ching, J. P. (1996). Moving from a teacher-generated to a learner-generated inquiry curriculum within a multiple ways of knowing framework: Issues and challenges. Dissertation, Indiana University. UMI Dissertation Services: A Bell & Howell Company.

Coffey, A., & Atkinson, P. (1996). Narratives and stories. *Making sense of qualitative data* (pp. 54-82). Thousand Oaks: Sage.

Confrey, J. (1985). Towards a framework for constructivist instruction. In E. Fennema, T.P. Carpenter, & S. J. Lamon (eds.). *Integrating research on teaching and learning mathematics* (pp. 92-131). Madison, WI: Wisconsin Center for Educational Research, University of Wisconsin-Madison.

Daloz, L. (1999). *Mentor*. San Francisco: Jossey-Bass.

Daloz, L. (1986). *Effective teaching and mentoring*. San Francisco: Jossey-Bass.

Daloz, L. A. (1983). Mentors: Teachers who make a difference. *Change, 15* (6), 24-27.

deMarris, K., Roulston, K, & Lewis, J. (April 2002). *Learning to interview: The student researcher as research participant*. Paper presented at the Annual Meeting of the American Educational Researcher Association, New Orleans.

Denzin, N. K., & Lincoln, Y. (Eds.) (1998). *Collecting and interpreting qualitative materials* (pp. 110-129). Thousand Oaks: Sage.

Dewey, J. (1938). *Experience and education*. New York: The Macmillan Co.

Drago-Severson, E. (in press). *Helping teachers learn: Principals' leadership lessons for transformation*. Thousand Oaks, CA: Corwin Press, Inc.

Drago-Severson, E. (in press). *Toward a "New Pluralism" in the ABE/ESOL Classroom: A Constructive Developmental Approach*. New York: Teachers College Press.

Drago-Severson, E. (2002). *Qualitative analytic strategies course syllabus*.

Drago-Severson, E. (2002). *Qualitative analytic strategies course handouts* (#'7, 13).

Drago-Severson, E. (2002). *Qualitative analytic strategies final course evaluations*.

Drago-Severson, E. (August 2001). 'We're trying to get ahead': A developmental view of changes in Polaroid learners' conceptions of their motivations for learning, expectations of teachers, and relationship to work. In R. Kegan, M. Broderick, E. Drago-Severson, D. Helsing, N. Popp, & K. Portnow (Eds.), *Toward a "new pluralism" in the ABE/ESOL classroom: Teaching to multiple "cultures of mind"* (pp. 477-614). NCSALL Research Monograph #19. Boston: World Education.

Drago-Severson, E., Helsing, D., Kegan, R., Broderick, M., Portnow, K., & Popp, N. (2001a). The power of a cohort and collaborative groups. *Focus on Basics, 5B*, 15-22.

Drago-Severson, E., Kegan, R., Helsing, D., Broderick, M., Popp, N., & Portnow, K. (2001b). Three developmentally different types of learners. *Focus on Basics, 5B*, 7-9.

Drago-Severson, E., & Berger, J. (August 2001). *'Not I Alone': The power of adult learning in an adult diploma program cohort*. In R. Kegan, M. Broderick, E. Drago-Severson, D. Helsing, N. Popp, & K. Portnow, *Toward a "new pluralism" in the ABE/ESOL classroom: Teaching to multiple "cultures of mind"* (pp. 379-476). *NCSALL Research Monograph #19*. Boston: World Education.

Eble, K. E., & Noonan, J. F. (1983). *Learning in groups*. San Francisco: Jossey-Bass, Inc.

Evans, R. (1996). *The human side of change: Reform, resistance, and the real-life problems of innovation*. San Francisco: Jossey-Bass.

Foote, C. J., Vermette, P. J., & Battaglia, C. F. (2001). *Constructivist strategies: meeting standards and engaging adolescent minds*. Larchmont, N.Y: Eye on Education.

Gaff, J. (1989). *Interdisciplinary studies in higher education*. Education Digest, pp. 55, 57-61.

Good, T.L. & Brophy, J.E. (2000). *Looking in classrooms*. New York: Longman.

Gumport, P. J. (1997). Public universities as academic workplaces. *Daedalus, 126*(4), 113-136.

Helsing, D., Drago-Severson, E., Kegan, R., Popp, N., Broderick, M., & Portnow, K. (2001). ABE/ESL learners' experiences of change. *Focus on Basics, 5B*, 10-14.

Johnson, S. M. (1990). *Teachers at work: Achieving success in our schools*. New York: Basic Books.

Johnson, S. M. (1996). *Leading to change: The challenge of the new superintendency*. San Francisco: Jossey-Bass.

Johnson, D. W., & Johnson, R. (1989). *Cooperation and competition: Theory and research*. Edina, MN: Interaction Book Company.

Kvale, S. (1996). From speech to text. *Interviewing: An introduction to qualitative research interviewing* (pp. 160- 175). Thousand Oaks: Sage.

Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge: Harvard University.

Kegan, R. (1982). *The evolving self: Problems and process in human development*. Cambridge: Harvard University.

Kegan, R. & Lahey, L. (2001). *How the way we talk can change the way we work*. San Francisco: Jossey-Bass/Wiley.

Kegan, R., Broderick, M., Helsing, D., Popp, N., & Portnow, K. (2001). *Executive summary: Toward a "new pluralism" in the ABE/ESOL classroom: teaching to multiple "cultures of mind." NCSALL Monograph #19a*: World Education & NCSALL.

Kegan, R., & Lahey, L. L. (1984). Adult leadership and adult development: A constructivist view. In B. Kellerman (Ed.), *Leadership* (pp. 199-230). Englewood Cliffs, NJ: Prentice-Hall.

Lagemann, E. C. (2000). An elusive science: The troubling history of education research. Chicago: The University of Chicago Press.

Lagemann, E. C., & Shulman, L. S. (1999). *Issues in education research: Problems and possibilities.* San Francisco: Jossey-Bass Publishers.

Lapadat, J. C., & Lindsay, A. C. (1999). Transcription in research and practice; From standardization of technique to interpretative positioning. *Qualitative inquiry, 5*, 64-86.

Levine, S. L. (1993). Reflections on school leadership: Perspectives on change. *Independent School, 15*, 25-28.

Levine, S. L. (1989). *Promoting adult development in schools: The promise of professional development.* Boston: Allyn and Bacon.

Maxwell, J. A. (1996). *Qualitative research design: An interactive approach.* Thousand Oaks, CA.: Sage.

Metz, M. H. (2001). Intellectual border crossing in graduate education: A report from the field. *Educational Researcher, 30*(5), 12-18.

Mezirow, J. (1991). *Transformative Dimensions Of Adult Learning.* San Francisco: Jossey-Bass.

Mezirow, J. and Associates (2000). *Learning As Transformation: Critical Perspectives On A Theory In Progress.* San Francisco: Jossey-Bass.

Miles, M. B., & Huberman, A. M. (1994). *An expanded sourcebook: Qualitative data analysis (second edition).* Thousand Oaks: Sage.

Miller, D. W. (1999). The black hole of education research. *Chronicle of higher education,* August 6: A17. Washington, DC.

Neumann, A., & Peterson, P. L. (Eds.). (1997). *Learning from our lives: Women, research, and autobiography in education.* New York: Teachers College Press.

Neumann, A., Pallas, A. M., & Peterson, P. L. (1999). Preparing education practitioners to practice education research. In E. C. Langemann & L. S. Shulman (Eds.), *Issues in education research: Problems and possibilities* (247-288). San Francisco: Jossey-Bass Publishers.

Oja, S. N. (1991). Adult development: Insights on staff development. In A. Lieberman & L. Miller (Eds.), *Staff Development for education in the '90s: New demands, new realities, new perspectives* (pp. 37-60). New York: Teachers College Press.

Page, R. N. (2001). Reshaping graduate preparation in educational research methods: One school's experience. *Educational Researcher, 30*(5), 19-25.

Pallas, A. M. (2001), Preparing education doctoral students for epistemological diversity. *Educational Researcher, 30* (5), 6-11.

Pedersen, J. E., & Digby, J. E. (1995). *Secondary schools and cooperative learning: Theories, models, and strategies.* New York, NY: Garland Publishing, Inc.

Perkins, D. N. (1992). *Smart schools: Better thinking and learning for every child.* New York: The Free Press.

Piaget, J. (1980). *Experiments in contradiction.* Chicago: University of Chicago Press.

Rogers, A. (2001). *Relational research methods with children: Interpretative poetics.* Cambridge: Harvard Graduate School of Education. Unpublished paper.

Sarason, S. B. (1995). *Revisiting the culture of schools and the problem of change.* New York: Teachers College Press.

Schoenfeld, A. H. (1999). The core, the canon, and the development of research skills. Issues in the preparation of educational researchers. In E. C. Langemann & L. S. Shulman (Eds.), *Issues in education research: Problems and possibilities* (166-202). San Francisco: Jossey-Bass Publishers.

Siddle Walker, V. (1999). Culture and commitment: Challenges for the future training of education researchers. In E. C. Langemann & L. S. Shulman (Eds.), *Issues in education research: Problems and possibilities* (224-244). San Francisco: Jossey-Bass Publishers.

Silverman, D. (2001). *Interpreting qualitative data: Methods for analyzing talk, text, and interaction.* Thousand Oaks: Sage.

Simpson, I. H. (1979). *From student to nurse: A longitudinal study of socialization.* New York: Cambridge University Press.

Snelbecker, G. (1974). *Learning theory, instructional theory, and psychoeducational theory design.* New York: McGraw Hill.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory.* Thousand Oaks, CA.: Sage.

Taylor, K., Marienau, C., & Fiddler, M. (2000). *Developing adult learners: Strategies for teachers and trainers*. San Francisco: Jossey-Bass.

Tchudi, S. & Lafer, S. (1996). *The interdisciplinary teacher's handbook: Integrated teaching across the curriculum*. Portsmouth, NH: Heinemann.

Tennant, M., & Pogson, P. (1995). *Learning and change in the adult years*. San Francisco: Jossey-Bass.

Tooley, J., & Darby, D. (1998). *Educational research, a critique: A survey of published educational research*. London, England: Office for Standards in Education.

Unruh, G. G. (1975). *Responsive curriculum development: theory and action*. Berkeley, California: McCutchan Pub. Corp.

Viadero, D. (1999). What is (and isn't) research? *Education Week, 18*(41), 33-38. Washington, DC: Editorial Projects in Education.

Vygotsky, L. S. (1978). *Mind in society. The development of higher psychological processes*. (M. Cole, V. John-Steiner, S. Schribner, & E. Souberman, Eds. and Translators) Cambridge, MA: Harvard University Press.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York: Cambridge University Press.

Wolcott, H. (2001). *Writing up qualitative research (second edition)*. Thousand Oaks: Sage.

Young, L. J. (2001). Border crossing and other journeys: Re-envisioning the doctoral preparation of educational researchers. *Educational Researcher, 30*(5), 3-5.

**Table 1**

**Table 1: Learners' Constructions of Good Teachers (across all three sites)**

| WAY OF KNOWING | LEARNER EXPECTATIONS FOR A GOOD TEACHER | SAMPLE QUOTATIONS |
|---|---|---|
| **Instrumental Knowers** | For these learners, good teachers are those who show them how to learn. Good teachers *give* them their knowledge and the rules they need to follow to get the right answers. They know that they have learned something because they can do it (demonstrate a behavior) and because they get a good grade (a consequence). | Good teachers… "give you that little push;" "make me learn;" "explain how do to it, ask you write it down, and you write down exactly how to do it. Then we'd do it." |
| **Socializing Knowers** | For these learners, good teachers are those who care about them. Good teachers explain things to help them understand. Good teachers really listen and support them. Good teachers *know* what is good for them to know, and they tell them what they *should* know. These learners describe good teachers as having certain human qualities; good teachers are kind, patient and encouraging. These learners can feel, inside, when they have learned something and the teacher acknowledges them in that. | "If you don't have a good teacher, you're not going to be self-confident." "If [the teacher] doesn't teach you the way you learn good, that doesn't help you." "I ask the teacher to explain to me how I'm going to do it." Good teachers "keep explaining things in different ways, "show you different ways to learn;" "help you feel important and accepted… never forget you." Good teachers have a "kind heart;" "don't give up on students. You can ask her anything—she's interested in your learning. She cares so much." |
| **Self-Authoring Knowers** | For these learners, good teachers are one source of knowledge, and they see themselves and their classmates as other sources. These learners offer feedback to teachers to help them improve their practices and expect good teachers to listen to their feedback. These students think that good teachers use a variety of teaching strategies in their practice. Good teachers are those who help them to meet their own internally generated goals. These students know that they have learned something and when they have, they can then think of different ways to teach what they know to others. | Good teachers "understand their students." "She learn from me, I learn from her." "No matter how good a teacher you have, if you don't really want to learn, you're not going to learn nothing." Good teachers "make learning interesting. It has to be interesting to the student." "What you do with knowledge after it's given to you is of your own choosing." "I think it's very tough for a teacher to teach and listen and explain all the time." Good teachers "do their jobs and help me to do better, I'm proud of that." |

(Source: Adapted from Drago-Severson (August 2001). This chart appears in Drago-Severson, E., Kegan, R., Helsing, D., Broderick, M., Popp, N., & Portnow, K. (October 2001). *Three developmentally different types of learners. Focus on Basics, 5B*, 7-9.

## Table 2

**Table 2: Learners' Constructions of the Cohort as a Holding Environment for Academic Learning**

| WAY OF KNOWING | LEARNER EXPERIENCE OF THE COHORT | SAMPLE QUOTATIONS |
|---|---|---|
| **Instrumental Knowers** | Fellow cohort members helped these learners to obtain the "right skills, right answers, and facts" they needed to know (these students construct knowledge as an accumulation of facts and skills). Their peers provided them with information and concrete help. Cohort members were valued because they "made us" keep coming, "wouldn't let us quit," "made us do our work." Cohort peers became informational resources for each other. | "You have an idea but another person has an idea and can help you…it can help you change." "You give your opinion. I give my opinion, they give their opinions. If you like that you can take something, something good you take." "You work with group. There is teamwork. You can ask them if you have something difficult or you have something you don't know. Sometimes you call each other." |
| **Socializing Knowers** | For these learners, feeling comfortable and safe expressing themselves to peers was what supported their learning. Valued cohort members "knew them" as persons, meaning knowing how they felt and thought. This acceptance enabled them to ask questions and risk making mistakes. These learners had strong relational orientations—how others viewed them became how they viewed themselves. Their own self-confidence was derived from their peers, who helped them to evaluate their academic learning. | "We all got our strengths. We all have our weaknesses. Maybe what I, what I am good at, maybe they lack of it. What they are good at, maybe I lack at it. We have all got our weaknesses to work on." "And just the words you don't know. And words and the meaning of it. The word and you don't know what it's meaning. And it's an embarrassing moment for me. But now I feel pretty confident. It's really important to me. I'm still in the learning process." |
| **Self-Authoring Knowers** | These cohort learners valued the process of joining together in collaboration and appreciated what they learned from that process. This made group learning meaningful to them. For many of these students, working with cohort members helped them to discover their own capabilities. They understood cohort learning as an opportunity to improve upon and demonstrate how they wanted to carry out their own beliefs and purposes. These learners had greater tolerance for, or appreciation of, conflict and difference. | "In groups, we share what we know. If someone knows something a little better, then that person helps others to know something a little better." "[Working with others] I realized I knew more than I thought I did." "When I learn math I try helping my co-students how to do the math, or you do your homework, let me see if you do exactly the way or why you don't try to do this work this way. [It's] a good way to learn, because if you see anything, anybody can help you. You can help work together, work in team. You learn more working together." |

(Source: Created by Drago-Severson (2001). This chart appears in Drago-Severson, E., Helsing, D., Kegan, R., Broderick, M., Portnow, K., & Popp, N. (October 2001). *The power of a cohort and collaborative groups. Focus on Basics, 5B*, 15-22.

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